

**AMENDMENT TO THE DRAWINGS:**

The attached REPLACEMENT SHEETS include changes to Figs. 2 and 3.  
Specifically, the crankshaft cradle is now represented as 88 in Figs. 2 and 3.

Attachments: Two (2) REPLACEMENT SHEETS including Figs. 2 and 3.

**REMARKS**

Applicant submits this Amendment in reply to the Office Action mailed September 16, 2005.

By this Amendment, Applicant has amended the specification. Accordingly, claims 1-26 remain pending in this application for reconsideration. As an initial matter, Applicant gratefully acknowledges the Examiner's indication of allowable subject matter in claims 3, 7, 9-11, 15, 18-20, 24 and 25.

Applicant has amended the specification to include a reference to government contract DE-FC05-00 OR 22806. Applicant also noticed that two claimed features were represented by the same number and has amended the detailed description and drawings to correct this error.

In the Office Action, claims 1, 2, 4-6, 8, 12-14, 16, 17, 21-23 and 26 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,633,552 to Huber. Applicant respectfully traverses this rejection.

Huber does not disclose or suggest the claimed invention. For example, claim 1 recites among other aspects, a second gear in mesh with a first gear, the second gear being connected to a vcr mechanism; and a third gear in mesh with the second gear, the third gear having a fixed center of rotation. Although Huber discloses three different gears, (Fig. 1.) Huber does not teach the second gear being connected to a vcr mechanism; and a third gear in mesh with the second gear, the third gear having a fixed center of rotation, as recited in claim 1. Huber simply teaches an internal combustion engine including means for varying the cylinder compression ratio during operation to thereby limit the maximum firing pressure encountered as engine loading is increased.

(Col. 1, lines 3-7.) Accordingly, Applicant respectfully requests withdrawal of the Section 102(b) rejection against claim 1.

Claims 2-13 depend from claim 1. Accordingly, Applicant submits that dependent claims 2-13 are allowable over Huber for at least the same reasons that independent claim 1 is allowable.

Independent claim 14 includes the same limitations discussed above as missing from Huber. Accordingly, Applicant traverses the rejection of independent claim 14 for the same reasons provided above with respect to claim 1. In particular, Huber does not disclose a second gear in mesh with the first gear, the second gear being connected to a vcr mechanism; and a third gear in mesh with the second gear, the third gear having a fixed center of rotation, as recited in claim 14. As noted above, Huber simply teaches means for varying the cylinder compression ratio during operation to thereby limit the maximum firing pressure encountered as engine loading is increased. (Col. 1, lines 3-7.) Accordingly, Applicant respectfully requests withdrawal of the Section 102(b) rejection against claim 14.

Claims 15-20 depend from claim 14. Accordingly, Applicant submits that dependent claims 15-20 are allowable over Huber for at least the same reasons that independent claim 14 is allowable.

Regarding independent claim 21, again Huber does not disclose or suggest all the elements of the claim. For example, among other aspects, Huber does not disclose a method of operating an internal combustion engine, including moving the axis of the crankshaft from a first position to a second position; sustaining a driving relationship between the crankshaft and the gear train; and maintaining a timing relationship

between the crankshaft and the camshaft, as recited in claim 21. As noted above, Huber simply teaches an internal combustion engine including means for varying the cylinder compression ratio during operation to thereby limit the maximum firing pressure encountered as engine loading is increased. (Col. 1, lines 3-7.). Accordingly, Applicant respectfully requests withdrawal of the Section 102(b) rejection against claim 21.

Claims 22-25 depend from claim 21. Accordingly, Applicant submits that dependent claims 22-25 are allowable over Huber for at least the same reasons that independent claim 21 is allowable.

Finally regarding independent claim 26, once again Huber does not disclose or suggest all the elements of the claim. For example, among other aspects, Huber does not disclose an internal combustion engine including means for sustaining a driving relationship between the crankshaft and the gear train; and means for maintaining a timing relationship between the crankshaft and the camshaft, as recited in claim 26. And as noted above, Huber simply teaches means for varying the cylinder compression ratio during operation to thereby limit the maximum firing pressure encountered as engine loading is increased. (Col. 1, lines 3-7.) Accordingly, Applicant respectfully requests withdrawal of the Section 102(b) rejection against claim 26.

In view of the foregoing remarks, Applicant submits that the claimed invention is neither anticipated nor rendered obvious in view of the prior art reference cited against this application. Applicant therefore requests withdrawal of the rejections and timely allowance of all pending claims.

The Office Action contains characterizations of the claims and the related art with which Applicant does not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization in the Office Action.

In discussing the specification, claims, and drawings in this Amendment, it is to be understood that Applicant is in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract and/or shown in the drawings. Rather, Applicant is entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

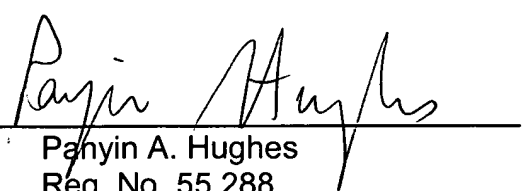
Please grant any extensions of time required to enter this Amendment and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: December 16, 2005

By:

  
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